

Title (en)

High intensity illuminating projector with reflective liquid crystal modulator

Title (de)

Beleuchtungsprojektor hoher Lichtintensität mit reflektierendem Flüssig-Kristallmodulator

Title (fr)

Projecteur de lumière à haute intensité avec modulateur de lumière à cristaux liquides monté en réflexion

Publication

EP 0757278 A2 19970205 (EN)

Application

EP 96304294 A 19960607

Priority

US 48719995 A 19950607

Abstract (en)

A light projection system is provided for lighting applications having one or more light projectors including a light beam source for generating a beam having an intensity suitable for a lighting applications, a beam modulation system including an addressable array of light scattering liquid crystal pixels capable of assuming transparent and opaque states and positioned to modulate unpolarized light transmitted in the beam, an active heat control system for the array including a heat sink in a thermally conductive relationship with the array, reflective material disposed between the array and the heat sink and a source of image control signals connected to the array to control the states of the pixels to vary the image projected by the beam. The system includes a liquid cooled liquid crystal modulator, LCD (79,400), mounted either in transmission mode or in reflection mode (see Figs. 11-12) behind a reflection prism (450,565), a liquid IR filter (214,240), an UV interference filter (215), neutral and colour filters (220,222) and gobo filters wheel (251). <IMAGE>

IPC 1-7

G02F 1/1335; **F21P 5/02**

IPC 8 full level

G02F 1/13 (2006.01); **F21S 8/00** (2006.01); **F21S 10/00** (2006.01); **F21V 9/04** (2006.01); **F21V 9/40** (2018.01); **F21V 29/02** (2006.01); **G02F 1/133** (2006.01); **G03B 21/00** (2006.01); **H04N 5/74** (2006.01); **H04N 9/31** (2006.01); **G02F 1/1335** (2006.01)

CPC (source: EP KR US)

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Cited by

EP1898679A3; CN1314274C; EP1291833A3; CN109310894A; US7249855B2; WO2004052022A1; WO2006069167A1; WO2005103805A1; WO03056841A1; WO2004052023A1; EP3408695B1

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